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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,760	05/14/2001	Pertti Tormala	2880/347	6881

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EXAMINER

PRIDDY, MICHAEL B

ART UNIT PAPER NUMBER

3732

DATE MAILED: 03/24/2004

66.

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/853,760

Applicant(s)

TORMALA ET AL.

Examiner

Michael B Priddy

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 and 8 is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 9 and 10 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-5, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goble et al. in view of Törmälä et al. (WO99/49792).

Goble teaches a fastener for body tissue repair comprising: a shaft 31 comprising a proximal portion 35 and a distal portion 33, said proximal portion 35 having a tapered, curved end 38 terminating in a sharp tip 38d configured to arrest the movement of said shaft 31 in the distal direction, said distal portion 33 having one or more protrusions 34, wherein said protrusions 34 have proximal surfaces configured to arrest the movement of the shaft in the proximal direction and distal surfaces configured to permit the movement of the shaft 31 in the distal direction. The method for fixation of a fibrous implant or tissue transplant is described in lines 1-47 of column 6 and show in Fig. 4. The Examiner has interpreted the "ligament, tendon, or like graft" mentioned by Goble et al. as being fully equivalent to the "connective tissue transplant" recited in claim 10 of the present invention.

Hence, Goble et al. teaches all of the limitations of the present invention except a portion of said shaft further comprises one or more longitudinal ridges; wherein said

protrusions protrude from said one or more longitudinal ridges; wherein one or more ridges run the length of said shaft; and wherein said fastener comprises a bioactive material.

Törmälä et al. teaches a bioabsorbable surgical fastener having longitudinal ridges R running the length of the shaft (Fig. 4A), said ridges including protrusions protruding therefrom. The longitudinal ridges, as mentioned in lines 10-18 of page 6, "Because of their increased prominence, it is also easier to manufacture protrusions on ridges. Moreover, the ridges unexpectedly promote healing of the rupture by providing channels along the interiors of the ridges through which beneficial blood flow can occur along the length of the device..." Also, said fastener, according to lines 16-21 of page 15, "may contain one or more bioactive substances, such as antibiotics, chemotherapeutic substances, angiogenic growth factors, substances accelerating the healing of the wound, growth hormones or the like." This is advantageous in surgical use because bioactive implants "chemically contribute to the healing of the lesion in addition to providing mechanical support." It would have been obvious to one of ordinary skill in the art at the time of the present invention to form the fastener as taught by Goble et al. with longitudinal ridges thereon to promote healing of the a rupture and to form the fastener to include a bioactive material so that the fastener could chemically contribute to the healing of the surgery site therefore reducing healing time.

Allowable Subject Matter

Claims 7 and 8 are allowed.

Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 2-4 were previously indicated to contain allowable subject matter. However, after further review, particularly of the Törmälä et al. reference, the Examiner believes the limitations set forth by these claims are taught by the combination of Goble et al. and Törmälä et al. The Examiner sincerely regrets any inconvenience to Applicant or Applicant's representative.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael B. Priddy whose telephone number is (703) 308-8620. The examiner can normally be reached on Mon.-Fri. 8 a.m. - 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (703) 308-2582. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael B. Priddy

Michael B. Priddy
March 22, 2004